ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD RENUMBERING, AMENDING AND CREATING RULES

The Wisconsin Natural Resources Board proposes an order to renumber; to amend; and to create, relating to	
	AM-XX-02
Authorizing statutes: Stats.	•
Statutes interpreted: Stats.	
Analysis Prepared by the Department of Natural Res	sources
ANALYSIS INSERTED HERE	

AMENDED DEFINITIONS FOR 400 SERIES

Drafters Note: Underline and strike through are from existing rule language

SECTION____ NR 400.02(27m), (45e) and (55m) are created to read:

NR 400.02(27m) "Approved material safety data sheet" means a material safety data sheet which meets the reporting requirements of the superfund amendments reauthorization act of 1986 (42 USC 9671 to 9675) or regulations of the occupational safety and health administration under 29 CFR 1910.1200(g), as in effect on February 1, 1998.

NR 400.02(45e) "Compression ignition internal combustion engine" means an engine design with operating characteristics significantly similar to the theoretical diesel combustion cycle. The absence of a throttle to regulate intake air flow for controlling power during normal operation is indicative of a compression ignition engine.

Combustion of the fuel in the engine proper is indicative of an internal combustion engine.

NR 400.02(55m) "Due diligence" means one of the following:

- (a) A reasonable search and inquiry conducted by the owner or operator to identify and quantify emissions of hazardous air contaminants at the facility and determine which, if any, are subject to regulation under the provisions in chs. NR 406, 407, 438 and 445. The search and inquiry is reasonable if it entails an investigation of facility operations that the owner or operator determines are likely to cause emissions of hazardous air contaminants that are listed on an approved material safety data sheets or otherwise brought into the facility or that are reasonably expected to be created through combustion or the processing, treatment of disposal or raw materials or waste.
- (b) A review by the owner or operator of the criteria listed in s. NR 445.10 to determine whether the source is subject to regulation under chapters NR 406, 407, 438 and 445.

SECTION____ NR 400.02(95) and (162) are amended to read:

NR 400.02(95) "Maximum theoretical emissions" means the quantity of air contaminants that theoretically could be emitted by a stationary source without control devices based on the design capacity or maximum production capacity of the source. When determining annual maximum theoretical emissions, a source shall be presumed to operate 8,760 hours per year unless its physical design precludes 8,760 hours of operation per year. Where a source's physical design restricts the number of hours it may operate, annual maximum theoretical emissions shall be calculated taking this restriction into account. In determining the maximum theoretical emissions of VOCs for a source, the design capacity or maximum production capacity shall include the use of raw materials,

coatings and inks with the highest VOC content used in practice by the source. <u>In determining the maximum</u> theoretical emissions of a hazardous air contaminant for a source, the design capacity or maximum production capacity shall include the use of raw materials, coatings, inks and fuels with the highest hazardous air contaminant content used in practice by the source. Realistic operating conditions shall be taken into account in determining emissions under this subsection.

- (162) "Volatile organic compound" or "VOC" means any organic compound which participates in atmospheric photochemical reactions. This includes any such organic compound other than the following compounds, which have been determined to have negligible photochemical reactivity:
 - (a) Methane.
 - (b) Ethane.
 - (c) Methylene chloride (Dichloromethane).
 - (d) 1,1,1-Trichloroethane (Methyl chloroform).
 - (e) Trichlorofluoromethane (CFC-11).
 - (f) Dichlorodifluoromethane (CFC-12).
 - (g) Chlorodifluoromethane (HCFC-22).
 - (h) Trifluoromethane (HFC-23).
 - (i) 1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113).
 - (j) 1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC-114).
 - (k) Chloropentafluoroethane (CFC-115).
 - (L) 1,1,1-Trifluoro-2,2-dichloroethane (HCFC-123).
 - (m) 2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124).
 - (n) Pentafluoroethane (HFC-125).
 - (o) 1,1,2,2-Tetrafluoroethane (HFC-134).
 - (p) 1,1,1,2-Tetrafluoroethane (HFC-134a).
 - (q) 1,1-Dichloro-1-fluoroethane (HCFC-141b).
 - (r) 1-Chloro-1,1-difluoroethane (HCFC-142b).
 - (s) 1,1,1-Trifluoroethane (HFC-143a).
 - (t) 1,1-Difluoroethane (HFC-152a).

- (u) Parachlorobenzotrifluoride (PCBTF).
- (v) Cyclic, branched or linear completely methylated siloxanes.
- (w) Acetone.

(wm) Perchloroethylene (Tetrachloroethylene)

- (x) 3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca).
- (xa) 1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb).
- (xb) 1,1,1,2,3,4,4,5,5,5-Decafluoropentane (HFC 43-10mee).
- (xc) Difluoromethane (HFC-32).
- (xd) Ethylfluoride (HFC-161).
- (xe) 1,1,1,3,3,3-Hexafluoropropane (HFC-236fa).
- (xf) 1,1,2,2,3-Pentafluoropropane (HFC-245ca).
- (xg) 1,1,2,3,3-Pentafluoropropane (HFC-245ea).
- (xh) 1,1,1,2,3-Pentafluoropropane (HFC-245eb).
- (xi) 1,1,1,3,3-Pentafluoropropane (HFC-245fa).
- (xj) 1,1,1,2,3,3-Hexafluoropropane (HFC-236ea).
- (xk) 1,1,1,3,3-Pentafluorobutane (HFC-365mfc).
- (xL) Chlorofluoromethane (HCFC-31).
- (xm) 1-Chloro-1-fluoroethane (HCFC-151a).
- (xn) 1,2-Dichloro-1,1,2-trifluoroethane (HCFC-123a).
- (xo) 1,1,1,2,2,3,3,4,4-Nonafluoro-4-methoxybutane ($C_4F_9OCH_3$).
- (xp) 2-(Difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CFCF₂OCH₃).
- (xq) 1-Ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$).
- (xr) 2-(Ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CFCF₂OC₂H₅).
- (y) Methyl acetate.
- (z) Perfluorocarbon compounds which fall into the following classes:
- 1. Cyclic, branched or linear completely fluorinated alkanes.
- 2. Cyclic, branched or linear completely fluorinated ethers with no unsaturations.
- 3. Cyclic, branched or linear completely fluorinated tertiary amines with no unsaturations.

4. Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Note: The test methods used to measure VOC are specified in s. NR 439.06(3).

CHANGES TO CONSTRUCTION PERMIT LANGUAGE

Drafters Note: Underline and strike through are from existing rule language

SECTION____ NR 406.04(2)(f)1. is amended to read:

NR 406.04(2)(f)1. The maximum theoretical emissions from the source for any hazardous air contaminant listed in Table 1 or Table 4 Table A, B or C of s.NR 445.04 s. NR 445.07 are not greater than the emission rate listed in Table 1 or Table 4 in columns (c), (d), (e) or (f) of Table A, B or C of s. NR 445.04 s. NR 445.07 for the air contaminant for the respective stack height.

SECTION____ NR 406.04(2)(f)2. is repealed and recreated to read:

NR406(2)(f)2. The maximum theoretical emissions from the source for any hazardous air contaminant listed in Table A, B or C of s. NR 445.07 are greater than the emission rate listed in columns (c), (d), (e) or (f) of Table A, B or C of s. NR 445.07 for the air contaminant for the respective stack height and the source satisfies all of the following conditions:

- a. The hazardous air contaminant is not subject to a control requirement in s. NR 445.07(1)(c), (2)(b), (3) or (4).
 - b. The source is not subject to s. NR 445.09(3)(a)2. or (b).
- c. The owner or operator of the source has certified that the source will be in compliance with all applicable requirements in subch. III of ch. NR 445 beginning the date the source commences operation. This certification shall be made in accordance with s. NR 445.08(6)(b).
- d. The owner or operator of the source shall keep records adequate to demonstrate compliance with the applicable requirements in subch. III of ch. NR 445. These records shall be maintained in accordance with s. NR 439.04(1) and (2) beginning the date the source commences operation.

Note: The address to submit certification under subd. 2c. is: Wisconsin Department of Natural Resources, Bureau of Air Management, PO Box 7921, Madison, WI 53707, Attention: New/Modified Source NR 445 Certification.

SECTION	NR 406.04(2)(f)3. and 3m. are repealed.					
SECTION	NR 406.04(2)(f)4. is renumbered NR 406.04(2)(f)3.					

SECTION___ NR 406.04(3)(a) and (c) are amended to read:

NR 406.04(3) DETERMINATION OF HAZARDOUS EMISSIONS. (a) For the purpose of determining emissions under sub. (2)(f), the owner or operator of a source may rely on information on an approved material safety data sheet if the approved material safety data sheet lists a hazardous air contaminant listed in Tables ‡ A to 5 C of s. NR 445.04 s. NR 445.07 and the for any hazardous air contaminant listed with a standard expressed as an ambient air concentration in Tables ‡, 2, 4 A, B or 5 C of s. NR 445.04 s. NR 445.07 constitutes (1%) (10,000 parts per million) or more of the material or the for any hazardous air contaminant listed with a standard expressed as a control requirement in Table 3 A, B or C constitutes 0.1% (1,000 parts per million) or more of the material. If an approved material safety data sheet for a material is not classified as proprietary and does not list a hazardous air contaminant in Tables ‡ A to 5 C of s. NR 445.04 s. NR 445.07 at or above the amounts listed in this paragraph, the material will be presumed not to result in emissions of a hazardous air contaminant unless a hazardous air contaminant is formed in processing the material.

(c) For the purpose of determining emissions under sub. (2)(f), the owner or operator of a source is not required to consider indoor fugitive emissions in calculating emissions of any substance in Table 1, 2, 4 A, B or 5 C of s. NR 445.04 s. NR 445.07.

SECTION___ NR 406.04(3)(e) is created to read:

NR 406.04(3)(e) A facility shall be deemed to be in compliance with this subsection so long as the owner or operator exercises due diligence and for any hazardous air contaminant listed in Tables A, B or C in s. NR 445.07 identified, the owner or operator determines that the emissions are below the applicable regulatory threshold or otherwise exempt from regulation, or the facility is meeting the applicable provisions set forth in this subsection.

SECTION NR 406.04(4)(a)4. is repealed.

SECTION____ NR 406.04(4)(a)5. is renumbered NR 406.04(4)(a)4. and as renumbered, amended to read:

NR 406.04(4)(a)4. The use will not result in a violation of any emission limit in chs. NR 405, 408, 409 and 415 to 436 and 445.

SECTION	NR 406.04(4)(a)6. is renumbered NR 406.04(4)(a)5.
Section	NR 406.07(2) is amended to read:
(2) If a	source undergoes a modification which is exempt from the requirement to obtain a construction
permit under s. N	VR 406.04(4), it will not be treated as a modified source for purposes of the emission limitations
under chs. NR 40	00 to 499 with the exception of the emission limitations in subch. III of ch. NR 445.

CHANGES TO OPERATION PERMIT LANGUAGE IF NECESSARY

Drafters Note: Underline and strike through are from existing rule language

SECTION____ NR 407.03(1)(sm) is amended to read:

NR 407.03(1)(sm) The following procedures for the remediation or disposal of soil or water contaminated with organic compounds, provided the potential to emit, considering emission control devices, for any hazardous air contaminant listed in Table 1 A to Table 5 C of s. NR 445.04 s. NR 445.07 is not greater than the emission rate listed in Table 1 A to Table 5 C of s. NR 445.04 s. NR 445.07 for the air contaminant at the respective stack height, the procedure is not a major source and the procedure is not subject to any standard or regulation under section 111 or 112 of the act (42 USC 7411 or 7412):

SECTION____ NR 407.03(2)(d) is amended to read:

NR 407.03(2)(d) The maximum theoretical emissions from the source for any hazardous air contaminant listed in Table 1, 2, 3, 4 or 5 A, B or C of s. NR 445.04 s. NR 445.07 do not exceed the emission rate listed in the table for the hazardous air contaminant for the respective stack height.

SECTION NR 407.04(3m) is created to read:

NR 407.04(3m) SAFE HARBOR FOR HAZARDOUS AIR CONTAMINANTS. A facility shall be deemed to be in compliance with this section so long as the owner or operator exercises due diligence and for any hazardous air contaminant listed in Tables A, B or C in s. NR 445.07 identified, the owner or operator determines that the emissions are below the applicable regulatory threshold or otherwise exempt from regulation, or the facility is meeting the applicable provisions set forth in this section.

SECTION NR 407.05(4)(c)1. is amended to read:

1. The maximum theoretical emissions of all air contaminants from all emissions units, operations and activities except for those exempted under subd. 9. or 10. Fugitive emissions from emissions units, operations and activities shall be included in the permit application in the same manner as stack emissions, regardless of whether the source category in question is included in the list of sources contained in the definition of major source.

Maximum theoretical fugitive emissions shall be calculated using average operating conditions and average weather

conditions. Only sources which manufacture, treat or process dispose of pesticides, rodenticides, insecticides, herbicides or fungicides shall include emissions of air contaminants identified as pesticides, rodenticides, insecticides, herbicides and fungicides in Table 2 in their permit applications. Only sources which manufacture, treat or dispose of pharmaceuticals shall include emissions of air contaminants identified pharmaceuticals in Table 2 in their permit applications. When preparing its application, the owner or operator of a facility may rely on information in an approved material safety data sheet. Trace contaminants need not be reported if they constitute less than 1% (10,000 parts per million) of the material, or 0.1% (1,000 parts per million) of the material if the air contaminant is listed with a control requirement in Table 3 A, B or C of s. NR 445.04 s. NR 445.07.

SECTION	Table 2 of NR 407.05 is amended t	o read:

[Insert Amended Table 2 Here]

CHANGES TO INVENTORY FEES LANGUAGE

Drafters Note: Underline and strike through are from existing rule language

SECTION __ NR 410.04(2)(b)2. is amended to read:

NR 410.04(2)(b)2. Except as provided under sub.(4), emissions in excess of 4,000 5,000 tons per year of any air contaminant from any one facility.

SECTION __ NR 410.03(2)(g) is amended to read:

NR 410.03(2)(g) \$650, if the source is subject to an emission limitation under chs. NR 446 to 483 469, or if the permit establishes an emission limit for a hazardous air contaminant listed in Table 1, 2, 4 A, B or 5 C of s. NR 445.07 of ch. NR 445.

SECTION NR 410.04(2)(b)5. and 6. are created to read:

NR 410.04(2)(b)5. Emissions of acetone, sec-butanol, tert-butanol, n-butyl acetate, chlorobromomethane, diethyl ketone, ethyl acetate, isobutyl acetate, methyl acetate, methyl acetylene, octane (all isomers), pentane (all isomers) and vinylidine flouride.

6. Emissions of di-n-octyl phthalate; octachlorostyrene; pentachlorobenzene; perylene; 1,2,3,4-tetrachlorobenzene; 1,2,4,5-tetrachlorobenzene; tributyl tin

CHANGES TO CONTROL OF ORGANIC COMPOUND EMISSIONS LANGUAGE

Drafters Note: Underline and strike through are from existing rule language

SECTION___ NR 419.07(4)(b)3. is amended to read:

NR 419.07(4)(b)3. The maximum emission limit for any hazardous air contaminant listed in tables 1 to 5 A to C of s. NR 445.07 of s. NR 445.04 under ch. NR 445.

SECTION___NR 419.07(6)(a)1.b. is amended to read:

NR 419.07(6)(a)1.b. When a substance listed in Table 3 with a control requirement in Table A, B or C of s. NR 445.04 s. NR 445.07 is present in the contaminated soil, testing for the Table 3 the listed substances shall be done once during the first 3 days of operation, once during the third week of operation, and once every 6 months thereafter. For soil contaminated with more than one Table 3 air contaminant with a control requirement in Table A, B or C, the department's bureau of air management may approve the testing of certain Table 3 substances that act as indicators for other Table 3 substances with control requirements in Table A, B or C present in the soil.

SECTION___ NR 419.07(7)(b) is amended to read:

NR 419.07(7)(b) Maintain records for 3 years quantifying the year-to-date weight of s. NR 445.04 Table 3 substances with control requirements in Table A, B or C of s. NR 445.07 contained in soil or water remediated for which testing was required under sub. (6).

CHANGES TO SOLVENT CLEANING OPERATIONS LANGUAGE

Drafters Note: Underline and strike through are from existing rule language

SECTION___ NR 423.04 is repealed

The Ozone Section of the Bureau of Air Management will be asked to evaluate the whether the NR 423.04 perchloroethylene dry cleaning needs to be retained if that compound is listed as an non-photochemically reactive.

CHANGES TO INVENTORY REPORTING LANGUAGE

Drafters Note: Underline and strike through are from existing rule language

SECTION __ NR 438.03(1)(a) is amended to read:

NR 438.03 Required emission inventory reports. (1) REPORTABLE AIR CONTAMINANTS AND LEVELS. (a) Any person owning or operating a facility which emits an air contaminant in quantities above the reporting levels listed in Table 1, except indirect sources of air pollution, shall annually submit to the department an emission inventory report of annual, actual emissions or, for particulate matter, PM₁₀, sulfur dioxide, nitrogen oxides, carbon monoxide and volatile organic compounds, throughput information sufficient for the department to calculate its annual, actual emissions. Reporting levels in column A of Table 1 shall be used for calendar years prior to 2004. Reporting levels in column B shall be used for calendar years 2004 and later.

SECTION NR 438.03(1)(b) is amended to read:

NR 438.03(1)(b) When preparing its emission inventory report, the owner or operator of a facility may rely on information in an approved material safety data sheet. Trace contaminants need not be reported if they constitute less than 1% (10,000 parts per million) of the material, or 0.1% (1,000 parts per million) of the material if the air contaminant is listed with a control requirement in Table 3- Table A or C of s. NR 445.04 s. NR 445.07.

SECTION____ NR 438.03(1)(e) and (f) are created to read:

NR 438.03(1)(e) A facility shall be deemed to be in compliance with this chapter so long as the owner or operator exercises due diligence and for any hazardous air contaminant listed in Tables A, B or C of s. NR 445.07 identified, the owner or operator determines that the emissions are below the applicable regulatory threshold or otherwise exempt from regulation, or the facility is meeting the applicable provisions set forth in this chapter.

(f) In the event a hazardous air contaminant that was not previously identified as a result of due diligence is later determined to be emitted from the facility, the facility shall not be deemed to be out of compliance with respect to that hazardous air contaminant; however, the department shall establish a date by which the facility shall meet provisions applicable to that hazardous air contaminant, taking into consideration the nature of the contaminant and the time and cost required to achieve compliance.

SECTION Table 1 of NR 43	38.03 is amended t	to read:
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[Insert Amended Table 1 Here]

CHANGES TO COMPLIANCE REQUIREMENT LANGUAGE IF NECESSARY

Drafters Note: Underline and strike through are from existing rule language

SECTION____ NR 439.03(4)(a)1. is amended to read:

NR439.03(4)(a)1. Hazardous air spills which require immediate notice to the department under s. NR 445.08 s. NR 445.15.

CHANGES TO HAZARDOUS AIR CONTAMINANT REQUIREMENTS

Drafters Note: Underline and strike through are from existing rule language

SECTION____ NR 445 Subchapter I (title) preceding s. NR 445.01 is created to read:

NR 445 (title) SUBCHAPTER I - GENERAL PROVISIONS

Drafters Note: Table of Content below has been modified and left for reviewer's convenience. It will not appear in the official draft rule as it appears below. The numbers you see after the sections in subchapter III refer to the placement of these sections in draft #4.

SUBCHAPTER I - GENERAL PROVISIONS

NR 445.01 Applicability; purpose

NR 445.02 Definitions

NR 445.03 General limitations

SUBCHAPTER II - STANDARDS DURING TRANSITION

NR 445.04 Emission limits for new or modified sources <u>last constructed or modified between October 1, 1988 and [insert effective date of rule]</u> NR 445.05 Emission limits for existing sources <u>constructed or last modified on or before October 1, 1988.</u>

SUBCHAPTER III - STANDARDS AFTER TRANSITION

NR 445.06 Safe Harbor (06)(1)l(l)

NR 445.07 Emission thresholds, standards and control requirements (04)

NR 445.08 Compliance requirements (06)

NR 445.09 Fuel, control and compliance requirements for compression ignition internal combustion engines combusting fuel oil (WW)

NR 445.10 Compliance requirements for sources of incidental emissions (XX)

NR 445.11 Variance (07)

NR 445.12 Hazardous air contaminant review (08)

NR 445.13 Hazardous air contaminant studies (09)

NR 445.14 Hazardous air contaminant limitations (10)

NR 445.15 Notice of hazardous substance air spills (11)

SECTION NR 445.01 is amended to read:

NR 445.01 **Applicability; purpose.** (1) APPLICABILITY. (a) This chapter applies to all <u>stationary</u> air contaminant sources <u>which may that may</u> emit hazardous <u>pollutants contaminants</u> and to their owners and operators. The emission limitations and control requirements of this chapter do not apply to a source of a hazardous air contaminant regulated under chs. NR 446 to 449 for the specific hazardous air contaminants regulated under those chapters or to a source which must meet a national emission standard for a hazardous air pollutant promulgated under section 112 of the act (42 USC 7412) for the specific air pollutant regulated under that standard.

(b) Notwithstanding par. (a), after the effective date of emission limitations of this chapter, a source of hazardous air pollutants subject to a national emission standard under section 112 of the act shall continue to comply with the provisions of this chapter provided this is allowed by regulations promulgated under section 112 of the act.

The emission limitations and control requirements in this chapter do not apply to hazardous air contaminants emitted by the emissions units, operations or activities that are subject to an emission standard promulgated under section 112 of the act (42 USC 7412). Hazardous air contaminants "subject to an emission standard promulgated

under section 112" means the hazardous air contaminants that are regulated by the name of the contaminant, by virtue of regulation of another substance as a surrogate for the contaminant, or by virtue of regulation of a species or category of hazardous air contaminants that addresses the contaminant.

(2) PURPOSE. This chapter is adopted under ss. 285.11, 285.13, 285.17 and 285.27, Stats., to establish emission limitations for hazardous pollutants contaminants from stationary sources.

SECTION NR 445.02 (intro.) is amended to read:

NR 445.02 Definitions. The definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter and in chs. NR 446 to 449:

SECTION NR 445.02(1), (2), (3), (9) and (9m) are repealed.

SECTION____ NR 445.02 (5), (6), (7), (9g), (10) and (11) are renumbered NR 445.02(3), (5), (6), (10), (11)

and (14).

SECTION____ NR 445.02(4) and (8) are renumbered NR 445.02(1) and (7), and as renumbered amended to read:

NR 445.02(1) "Best available control technology" or "BACT" means an emission limit for a hazardous air contaminant based on the maximum degree of reduction practically achievable as specified by the department on an individual case-by-case basis taking into account energy, economic and environmental impacts and other costs related to the source.

(7) "Lowest achievable emission rate" or "LAER" means the rate of emission of a hazardous air contaminant which reflects the more stringent of the following:

SECTION NR 445.02(2), (3g), (3m), (4), (8), (9), (12) and (13) are created to read:

NR 445.02(2) "Disposal" means the controlled discharge into the environment of a listed hazardous air contaminant in Table B or C for the expressed purpose of waste disposal.

(3g) "Environmental management system" means an organized set of procedures that conforms with International Organization for Standardization 14001 or that is determined by the department to be functionally

equivalent to ISO 14001 which is used to evaluate environmental performance and to achieve measurable or noticeable improvement in that environmental performance through planning and changes in operations, based on a commitment to superior environmental performance.

- (3m) "Environmental management system audit" means a review of an environmental management system that is conducted in accordance with standard and guidelines issued by the International Organization for Standardization and the results of which are documented and communicated to employees of the participant.
 - (4) "Essential service" means an activity to provide any of the following:
 - (a) Nuclear power plant emergency backup power generation.
 - (b) Combustion turbine start-up.
 - (c) Safety or asset protection.

Note: Examples include activities to provide emergency heating, ventilation, lighting, flood relief or spills response.

- (8) "Manufacturer" means those engaged in the process of making, fabricating, constructing, forming or assembling a product from raw, unfinished, semifinished or finished materials. Packing, bottling, labeling and packaging are all considered to be manufacturing activities.
- (9) "On-road fuel oil" means any diesel fuel, or distillate product, that is used, intended for use, or made available for use, as a fuel in diesel motor vehicles or diesel motor vehicle engines.
- (12) "Seasonal source" means a stationary source that remains, or returns to, a single location for at least two years and that operates at that single location three months or more each year.
- (13) "Treatment" means any method, technique or process, including thermal destruction, which changes the physical, chemical or biological character or composition of a listed hazardous air contaminant in Table B or C of s. NR 445.07 so as to render the contamination less hazardous, safer for transport or management, amenable to recovery, convertible to another useable material or reduced in volume.

SECTION NR 445.03 is amended to read:

NR 445.03 General limitations. No person may cause, allow or permit emissions into the ambient air of any hazardous substance in a quantity; or concentration or for a duration which is injurious to human health, plant or animal life unless the purpose of that emission is for the control of plant or animal. Hazardous substances include but are not limited to hazardous air contaminants listed in Tables A to C 1 to 5 of s. NR 445.04 s. NR 445.07.

SECTION____ NR 445 Subchapter II is created to read:

NR 445 (title) SUBCHAPTER II – STANDARDS FOR STATIONARY SOURCES DURING TRANSITION.

Drafters note: Additional existing language in ss. NR 445.04 and 445.05 may be deleted if found to be obsolete

SECTION NR 445.04 (intro.) is amended to read:

NR 445.04 Emission limits for new or modified sources <u>last constructed or modified between</u>

October 1, 1988 and [insert effective date of the rule].

SECTION____ NR 445.04(1) is amended to read:

NR 445.04(1) TABLE 1 SUBSTANCES. Except as provided in par. (c) or s. NR 406.07(2), no owner or operator of a stationary source on which construction or modification <u>last</u> commenced <u>after between</u> October 1, 1988 <u>and [insert effective date of the rule]</u> may cause, allow or permit emissions from a source of a hazardous air contaminant listed in Table 1 <u>of this section</u> in such quantity or duration as to cause ambient air concentrations off the source's property which exceed the limits in par. (a) or (b).

SECTION NR 445.04(1)(a)2. is amended to read:

NR 445.04(1)(a)2. Ten percent of the threshold limit value - time weighted average established by the American conference of governmental industrial hygienists, in the threshold limit values and biological exposure indices for 1987-1988, incorporated by reference in s. NR 484.11, for any 24-hour averaging period if the hazardous air contaminant is emitted no more than 5 days in any consecutive 30-day period and if the department determines after complying with s. NR 445.06(1) s. NR 445.12(1)(a) that such limits will not pose a threat to public health or welfare.

SECTION NR 445.04(2) is amended to read:

NR 445.04(2) TABLE 2 SUBSTANCES. Except as provided in par. (c), no owner or operator of a stationary source which manufactures or processes pesticides, rodenticides, insecticides, herbicides or fungicides and on which construction or modification <u>last</u> commenced <u>after between</u> October 1, 1988 <u>and [insert effective date</u>

of the rule] may cause, allow or permit emissions from the source of a hazardous air contaminant listed in Table 2 of this section in such quantity or duration as to cause ambient concentrations which exceed the limits in par. (a) or (b).

SECTION___ NR 445.04(3)(a) and (b) are amended to read:

NR 445.04(3) TABLE 3 SUBSTANCES. (a) *Group A*. Except as provided in par. (c), the owner or operator of any facility on which construction or modification last commenced after between October 1, 1988 and [insert effective date of the rule] and which emits any hazardous air contaminant listed in group A of Table 3 of this section in amounts greater than those listed in group A of Table 3 shall control emissions of those hazardous air contaminants to a level which is the lowest achievable emission rate. The lowest achievable emission rate shall be met by the emissions unit at the facility which emits the greatest amount of the hazardous air contaminant. If application of the lowest achievable emission rate to this emissions unit does not reduce facility emissions of the hazardous air contaminant to a level less than the rate listed in group A of Table 3 for the hazardous air contaminant, then the lowest achievable emission rate shall be met by other emissions units at the facility which emit decreasingly smaller amounts of the hazardous air contaminant until emissions from the facility are below the emission rate listed in group A of Table 3 or until all emissions units at the facility which emit at least 10% of the rate listed in group A of Table 3 for the hazardous air contaminant have met the lowest achievable emissions rate. If application of lowest achievable emissions rate to these emissions units does not result in the control of at least 50% of the potential emissions of the hazardous air contaminant from the facility, then the department may require application of lowest achievable emission rate on a reasonable array of smaller emissions units which emit the hazardous air contaminant.

(b) *Group B*. Except as provided in par. (c), the owner or operator of any facility on which construction or modification last commenced after between October 1, 1988 and [insert effective date of the rule] and which emits any hazardous air contaminant listed in group B of Table 3 of this section in amounts greater than those listed in group B of Table 3 shall control emissions of those hazardous air contaminants to a level which is the best available control technology. The best available control technology shall be met by the emissions unit at the facility which emits the greatest amount of the hazardous air contaminant. If application of the best available control technology to this emissions unit does not reduce facility emissions of the hazardous air contaminant to a level less than the rate listed in group B of Table 3 for the hazardous air contaminant, then best available control technology shall be met by

other emissions units at the facility which emit decreasingly smaller amounts of the hazardous air contaminant until emissions from the facility are below the emission rate listed in group B of Table 3 or until all emissions units at the facility which emit at least 10% of the rate listed in group B of Table 3 for the hazardous air contaminant have met best available control technology. If application of best available control technology to these emissions units does not result in the control of at least 50% of the potential emissions of the hazardous air contaminant from the facility, then the department may require application of best available control technology on a reasonable array of smaller emissions units which emit the hazardous air contaminant.

SECTION____ NR 445.04(4) is amended to read:

NR 445.04(4) TABLE 4 SUBSTANCES. Except as provided in par. (c) or s. NR 406.07(2), no owner or operator of a stationary source on which construction or modification <u>last</u> commenced <u>after between</u> October 1, 1988 <u>and [insert effective date of the rule]</u> may cause, allow or permit emissions from a source of a hazardous air contaminant listed in Table 4 <u>of this section</u> in such quantity or duration as to cause ambient air concentrations off the source's property which exceed the limits in par. (a) or (b).

SECTION___ NR 445.04(4)(a)2. is amended to read:

NR 445.04(4)(a)2. Ten percent of the threshold limit value - time weighted average established by the American conference of governmental industrial hygienists, in the threshold limit values and biological exposure indices for 1990-1991, incorporated by reference in s. NR 484.11, for any 24-hour averaging period if the hazardous air contaminant is emitted no more than 5 days in any consecutive 30-day period and if the department determines after complying with s. NR 445.06(1) NR 445.12(1)(a) that such limits will not pose a threat to public health or welfare.

SECTION___ NR 445.04(4r)(a) is amended to read:

NR 445.04(4r) TABLE 5 SUBSTANCES. (a) *Annual limitations*. Except as provided in par. (b) or s. NR 406.07(2), no owner or operator of a stationary source on which construction or modification last commenced after between January 1, 1995 and [insert effective date of the rule], may cause, allow or permit emissions from the constructed or modified source of a hazardous air contaminant listed in Table 5 of this section in such quantity or

duration as to cause ambient air concentrations off the source's property that exceed the reference concentration shown in Table 5 of this section on an annual basis.

Note: For the purposes of this subsection a source shall be considered as a modified source and required to achieve compliance with the provisions of this subsection only for those hazardous air contaminants not previously emitted or those hazardous air contaminants where there would be an allowed increase in emissions as a result of the modification.

SECTION____ NR 445.04(5)(a) and (b) are amended to read:

NR 445.04(5) INCINERATORS. (a) Any owner or operator of a stationary source on which construction or modification <u>last</u> commenced <u>after between</u> October 1, 1988 <u>and [insert effective date of the rule]</u> and which combusts municipal solid waste as defined in s. NR 500.03(150) or infectious waste shall comply with subs. (1) and (4) and shall control emissions of hazardous air contaminants listed in Table 3 <u>of this section</u> to a level which is the lowest achievable emission rate.

(b) Any owner or operator of a stationary source on which construction or modification last commenced after between January 1, 1995 and [insert effective date of the rule] and which combusts municipal solid waste as defined in s. NR 500.03(150) or infectious waste shall comply with sub. (4r).

SECTION___ NR 445.04(6)(a) is amended to read:

NR 445.04(6) COMPLIANCE REQUIREMENTS. (a) *Compliance timing*. Except as provided for in pars. (d), (e) and (f), any source which commences construction or modification after between October 1, 1988 and [insert effective date of the rule] shall meet the emission limitations in this section upon startup.

SECTION NR 445.05 (intro.) is amended to read:

NR 445.05 Emission limits for existing sources constructed or last modified on or before October 1, 1988.

SECTION____ NR 445.05(1)(a)2. is amended to read:

NR 445.05(1)(a)2. Ten percent of the threshold limit value - time weighted average established by the American conference of governmental industrial hygienists in the threshold limit values and biological exposure

indices for 1987-1988, incorporated by reference in s. NR 484.11, for any 24-hour averaging period if the hazardous air contaminant is emitted no more than 5 days in any consecutive 30-day period and if the department determines after complying with s. NR 445.12(1)(a) that such limits will not pose a threat to public health or welfare.

SECTION___ NR 445.05(4)(a)2. is amended to read:

NR 445.05(4)(a)2. Ten percent of the threshold limit value - time weighted average established by the American conference of governmental industrial hygienists in the threshold limit values and biological exposure indices for 1990-1991, incorporated by reference in s. NR 484.11, for any 24-hour averaging period if the hazardous air contaminant is emitted no more than 5 days in any consecutive 30-day period and if the department determines under s. NR 445.12(1)(a) that such limits will not pose a threat to public health or welfare.

SECTION____ NR 445.05(6)(g) is repealed.

SECTION____ NR 445.05(7) is repealed.

SECTION____ NR 445.06(1) is renumbered NR 445.12(1)(a), and as renumbered amended to read:

NR 445.12 **Hazardous air contaminant review.** (1)(a) The department staff shall consult with the department of health and social services prior to incorporating an emission limit under s. NR 445.(1)(a)2. or 445.05(1)(a)2. s. NR 445.07(1)(b) in an order or a permit.

SECTION____ NR 445.06(4) is renumbered NR 445.12(1)(b), and as renumbered amended to read:

NR 445.12(1)(b) The department staff shall consult with the department of health and social family services prior to establishing an emission limit, in a permit or order, for any hazardous air contaminant which is not listed in Table A, B or C 1, 2, 3 or 4 of s. NR 445.04 s. NR 445.07 or in threshold limit values and biological exposure indices for 1990-1991 adopted by the American conference of governmental industrial hygienists, incorporated by reference in s. NR 484.11.

SECTION___ NR 445.06(2) is repealed.

SECTION____ NR 445.06(3) is renumbered NR 445.12(2)(a), and as renumbered amended to read:

NR 445.12(2)(a) The department shall monitor changes in the classifications of hazardous air contaminants in Tables 1 to 5 of s. NR 445.04 as reported by the American conference of governmental industrial hygienists, the United States environmental protection agency, the international agency for research on cancer, and the national toxicology program and shall prepare rule modifications to the tables to incorporate these changes. The department shall presume that any hazardous air contaminant which is included on a list of known or suspected carcinogens by both the international agency for research on cancer and the national toxicology program is a hazardous air contaminant which should be listed in Table 3. This presumption may be overcome for adding or removing contaminants to or from Table 3 if the greater weight of evidence demonstrates the presumption is incorrect.

SECTION NR 445.06(5) is repealed.

SECTION____ NR 445.12(2)(b), (3), (4), (5) and (6) are created to read:

NR 445.12(2)(b) Beginning [3 years after effective date of rule] and no later than every three years thereafter, the department, in consultation with the department of health and family services, shall prepare a report that includes:

- 1. A listing of the changes in the classifications of hazardous air contaminants and of the hazardous air contaminants that meet or that no longer meet the presumptions listed in sub. (3),
- 2. An review of available information about the likely sources of emissions of and an assessment of whether the criteria set forth in sub. (4) are likely to apply to the hazardous air contaminants identified under this provision.
- 3. The department shall prepare rule modifications, as necessary, to revise Tables A, B or C of s. NR 445.07
- (3) (a) The department shall presume that any hazardous air contaminant which meets one or more of the following criteria is a hazardous air contaminant which should be listed in Table A, B or C.
- 1. The substance is included on a list of known or suspected carcinogens by both the international agency for research on cancer and the national toxicology program.

- 2. The substance has a threshold limit value established by the American conference of governmental industrial hygienists.
- 3. The substance has a reference concentration established by the United States environmental protection agency with an uncertainty factor of 300 or less.
- (b) The presumption under sub. (a) may be overcome if the greater weight of evidence demonstrates the presumption is incorrect.
- (4) Notwithstanding the provisions of (3), the department shall consider not listing a hazardous air contaminant in Table A, B or C if one of more of the following criteria are met:
- (a) The only critical effect listed by the American conference of governmental industrial hygienists is asphyxiation.
- (b) The substance possesses an explosive nature requiring safety procedures that preclude ambient concentrations that would present toxicity concerns.
 - (c) The threshold limit value is greater than 99 parts per million.
 - (d) The threshold limit value is equal to or greater than 10 milligrams per cubic meter.
- (e) The department determines that the primary risk that gives rise to the classification of the substance as a hazardous air contaminant is not inhalation exposure.
- (f) The department determines that other regulations provide adequate protection for public health or welfare.
- (g) The department determines that additional information is necessary to fully assess the need to list the hazardous air contaminant in Table A, B, or C. In that circumstance, the department may conduct a study under s. NR 445.13.
- (h) The department determines on the basis of other available information that listing the hazardous air contaminant in Table A, B, or C is not needed to provide adequate protection for public health or welfare.
- (5) The department shall prepare a rule modification to remove a hazardous air contaminant from Table A, B or C if, at any time, the department determines that listing the hazardous air contaminant in Table A, B or C is not needed to provide adequate protection for public health or welfare.
- (6) The department shall consider re-evaluating a hazardous air contaminant listed in this chapter whenever an affected source or other interested party submits a written request for such an evaluation and provides new or

additional information for the department's consideration. In conducting the re-evaluation, the department shall

consider the criteria set forth in this section and such other information that it deems relevant.

SECTION

NR 445.07 is renumbered NR 445.14(1).

SECTION___

NR 445.14(2) and (3) are created to read:

NR 445.14(2) In the event that emissions of a hazardous air contaminant are determined to be above the

applicable emission standard and the source is in compliance with the procedures established in this subchapter, the

source shall not be deemed to be out of compliance with respect to that hazardous air contaminant; however, the

department shall establish a date by which the source shall meet the emission standard applicable to that hazardous

air contaminant, taking into consideration the nature of the contaminant and the time and cost required to achieve

compliance with the standard.

(3) The department shall monitor sources of emission of the contaminants listed in s. NR 410.04(2)(b)5. If

the department determines that emissions monitored under this subsection are of such quantity, concentration or

duration that they exceed two and four tenths percent of their threshold limit value-time weighted average, it may

establish a limitation in a permit or order that will ensure the source does not cause concentrations off of the source's

property which exceed two and four tenths percent of the threshold limit value-time weighted for any consecutive

24-hour averaging period.

SECTION

NR 445.08 is renumbered NR 445.15.

SECTION NR 445 Subchapter III is created to read:

NR 445 (title) SUBCHAPTER III – STANDARDS FOR STATIONARY SOURCES AFTER TRANSITION.

NR 445.06 Safe Harbor. (I) A facility shall be deemed to be in compliance with this subchapter so long as the owner or operator exercises due diligence and for any hazardous air contaminant in Tables A, B or C of s. NR 445.07 identified, the owner or operator determines that the emissions are below the applicable regulatory threshold or otherwise exempt from regulation, or the facility is meeting the applicable emission standard set forth in this subchapter.

(2) In the event a hazardous air contaminant that was not previously identified as a result of due diligence is later determined to be emitted from the facility, the facility shall not be deemed to be out of compliance with respect to that hazardous air contaminant; however, the department shall establish a date by which the facility shall meet the emission standard applicable to that hazardous air contaminant, taking into consideration the nature of the contaminant and the time and cost required to achieve compliance.

NR 445.07 Emission thresholds, standards and control requirements. (1) GENERAL. Except as provided in sub. (5),

- (a) No owner or operator of a source may cause, allow or permit emissions of a hazardous air contaminant listed in Table A in a quantity or concentration or for a duration to cause an ambient air concentration of the contaminant off the source property which exceeds the ambient air standard in column (g) of Table A for the contaminant.
- (b) The owner or operator of a source subject to par. (a) may request an alternative emission standard of ten percent of the threshold limit value time weighted average established by the American conference of governmental industrial hygienists, in the threshold limit values and biological exposure indices for 2000, incorporated by reference in s. NR 484.11, for any contaminant with a 24-hour averaging period in column (h) of Table A if both of the following are satisfied:
 - 1. The hazardous air contaminant is emitted no more than 5 days in any consecutive 30-day period.

- 2. The department determines that after complying with s. NR 445.12(1)(a) the alternative emission standard will not pose a threat to public health or welfare.
- (c) The owner or operator of a source which emits a hazardous air contaminant for which a control requirement is identified in column (i) of Table A in an amount greater than the amount listed in column (c), (d), (e) or (f) of Table A for the contaminant shall control emissions of the contaminant to a level which is identified in column (i) of the table. The control requirement shall be applied according to the procedure in s. NR 445.08(1)(d).
- (2) MANUFACTURE, TREATMENT AND DISPOSAL OF PESTICIDES, RODENTICIDES, INSECTICIDES, HERBICIDES OR FUNGICIDES. In addition to sub. (1), except as provided in sub. (5)(c) and (d),
- (a) No owner or operator of a source that manufacturers, treats or disposes of pesticides, rodenticides, insecticides, herbicides or fungicides may cause, allow or permit emissions of a hazardous air contaminant listed in Table B in a quantity or concentration or for a duration as to cause an ambient air concentration off the source property which exceeds the ambient air standard in column (g) of Table B for the respective contaminant.
- (b) The owner or operator of a source which emits any contaminant with a control requirement identified in column (i) of Table B in an amount greater than the amount listed in column (c), (d), (e) or (f) of Table B control the emissions of the contaminant to the level identified in column (i) of the table. The control requirement shall be applied according to the procedure in s. NR 445.08(1)(d).
- (3) MANUFACTURE, TREATMENT AND DISPOSAL OF PHARMACEUTICALS. In addition to sub. (1), except as provided in sub. (5)(c) and (d), the owner or operator of a source that manufacturers, treats or disposes of pharmaceuticals and which emits any contaminant with a control requirement identified in column (i) of Table C in an amount greater than the amount listed in column (c), (d), (e) or (f) of Table C shall control the emissions of the contaminant to the level identified in column (i) of the table. The control requirement shall be applied according to the procedure in s. NR 445.08(1)(d).
- (4) MUNICIPAL SOLID WASTE AND INFECTIOUS WASTE INCINERATORS. (a) Except as provided for in par. (b), any owner or operator of a source which combusts municipal solid waste as defined in s. NR 500.03(150) or infectious waste shall comply with sub. (1), and shall control emissions of contaminants having a control requirement identified in column (i) in Table A, B or C to a level which is the lowest achievable emission rate.
- (b) A source which combusts refuse derived fuel in a boiler and obtains less than 50% of its heat input from the refuse derived fuel is not subject to this subsection.

- (5) EXEMPT EMISSIONS.
- (a) Emissions from the combustion of group 1 virgin fossil fuels.
- (b) Emissions from the combustion of group 2 virgin fossil fuels vented from a stack which has downwash minimization stack height or a height approved by the department.
 - (c) Emissions from a laboratory.
- (d)1. Indoor fugitive emissions with standards expressed as ambient air concentrations having 1 hour or 24 hour averaging times in column (h) in Table A, B, or C.
- 2. Indoor fugitive emissions with standards expressed as control requirements or as ambient air concentrations having an annual averaging time in column (h) in Table A, B, or C which are exhausted to the ambient air through general building ventilation and which have a threshold limit value established by the American conference of governmental and industrial hygienists in the threshold limit values and biological exposure indices for 2000, incorporated by reference in s. NR 484.11, and for which the source demonstrates to the department that it is in compliance with applicable occupational safety and health administration requirements.
- (e) Emissions with standards expressed as control requirements in column (i) of Table A from any gasoline dispensing facility which meets the requirements of s. NR 420.04(3)(b) to (i) and which dispenses less than 2 million gallons of gasoline a year.
- (f) Emissions with standards expressed as control requirements in column (i) of Table A from any gasoline dispensing facility which does not meet the requirements of s. NR 420.04(3)(b) to (i) and which dispenses less than 1.25 million gallons of gasoline a year.
 - (g) Emissions of amorphous and crystalline silica.
 - (h) Emissions of wood dusts.
- (i) Emissions with standards expressed as control requirements in column (i) of Table A from the combustion of wood by combustion units on which construction or modification last commenced on or before October 1, 1988 and which operate with good combustion technology. Good combustion technology means that technology which provides for a minimization of hazardous air contaminants with control requirements in column (i). Good combustion technology will be determined on a case-by-case basis by the department, taking into account the type of fuel to be burned, the economic and environmental impacts of the combustion, and other costs related to

the source. Good combustion technology may include, but is not limited to, consideration of such factors as temperature, residence time, carbon monoxide emissions, excess oxygen, and turbulence.

Note: See department memo dated July 7, 1999, Wood Combustion and Compliance with Chapter NR 445 for further information

[Insert New Tables A, B and C Here]

NR 445.08 Compliance requirements. Any compliance demonstration made under this section shall be done in accordance with the conditions allowed by permit or order resulting in the greatest emissions of the hazardous air contaminant, or in absence of permit or order, by using the maximum theoretical emissions from the source.

- (1) COMPLIANCE DEMONSTRATION FOR EMISSION STANDARDS AND CONTROL REQUIREMENTS. The owner or operator of a source shall demonstrate compliance with the emission standards and control requirements in s. NR 445.07 for any hazardous air contaminant by doing any of the following:
 - (a) Limiting potential, non-exempt emissions of any hazardous air contaminant:
 - 1. To less than the relevant threshold in columns (c), (d), (e) or (f) of Tables A, B or C of s. NR 445.07.
 - 2. To a level needed to satisfy the conditions in sub. (2)(a).
- (b) Limiting potential, non-exempt emissions of any contaminant which has a standard expressed as an ambient air concentration in Table A or B to a quantity or concentration or for a duration to less than the concentration allowed under column (g) of the table.
- (c) Demonstrating that the concentration of any contaminant which has a standard expressed as an ambient air concentration in Table A or B in the stack to less than the concentration allowed under column (g) of the table.
- (d) The control requirements in s. NR 445.07(1)(c), (2)(b), (3), (4) or s. NR 445.09(3)(b) shall be first applied to the emissions unit at the facility which emits the greatest amount of the hazardous air contaminant. If application of the control requirement to this emissions unit does not reduce facility emissions of the hazardous air contaminant to a level less than the rate listed in column (c), (d), (e) or (f) of Table A, B or C for the contaminant, the control requirement shall be applied to other emissions units at the facility which emit decreasingly smaller amounts of the contaminant until emissions from the facility are below the emission rate listed in column (c), (d), (e)

or (f) of Table A, B or C for the contaminant or until the control requirement has been applied to all emissions units at the facility which emit at least 10% of the rate listed in column (c), (d), (e) or (f) of Table A, B or C for the contaminant. If application of the control requirement to these emissions units does not result in the reduction of at least 50% of the potential emissions of the contaminant from the facility, the department may require application of the control requirement on a reasonable array of smaller emissions units which emit the contaminant.

Note: The term "control requirement" is used to represent the applicable level of emission reduction required for the hazardous air contaminant under review, in other words LAER or BACT. These reduction options include lower emitting processes or practices, material substitution, or add-on controls, or any combination of the options.

- (2) ALTERNATIVE MEAN OF COMPLIANCE. (a) The owner or operator of a source may use the following alternative means of complying with any control requirements in s. NR 445.07(1)(c), (2)(b) or (3) by demonstrating both of the following:
- 1. For any contaminant with a control requirement in Tables A, B or C s. NR 445.07 having a united states environmental protection agency unit risk factor, limiting potential emissions of the contaminant from the facility, including those exempt under s. NR 445.07(5), to such quantity or concentration or for a duration as to not cause an ambient air concentration off the source property which results in a cumulative inhalation impact greater than 1 in 100,000. The cumulative inhalation impact is determined by the following equation:

1 x $10^{-5} \ge \Sigma$ (individual impacts _{annual average} x US EPA Unit Risk Factor)

individual impact is the annual average concentration of a contaminant in micrograms per cubic meter

US EPA Unit Risk Factor for the contaminant is expressed in ______

- 2. For any contaminant with a control requirement in Tables A, B or C not having a united states environmental protection agency unit risk factor, limiting potential emissions of the contaminant from the facility, including those exempt under s. NR 445.07(5), to less than the relevant threshold in columns (c), (d), (e) or (f) of Tables A, B or C.
- (b) This paragraph applies only to the owner or operator of an iron foundry for the reduction of hazardous air contaminants emitted from the casting process subject to BACT requirements in ss. NR 445.07(1)(c) or NR 445.11(1)(a)3. unless the secretary of the department authorizes the use of this paragraph by other source categories.

where:

and;

- 1. The owner or operator of a source may use the following alternative means of complying with BACT control requirements in ss. NR 445.07(1)(c) or NR 445.11(1)(a)3. by providing the department with those portions of an environmental management system document that contain a plan to reduce emissions of the hazardous air contaminants subject to control requirements.
 - 2. The plan shall include all of the following:
- a. Measurable emission reduction objectives and targets, including baseline emissions and target emission levels or rates.
 - b. Plan and procedures to achieve the objectives and targets.
 - c. Description of the operational controls and activities.
 - d. The training program necessary to institute the operational controls.
 - e. The measurement and monitoring procedures.
- f. The environmental management system audit or management review provisions, including documentation of corrective and preventive actions.
- g. A statement from the responsible official demonstrating the company's commitment to an environmental management system and the resources needed to maintain and improve the system.
- 3. The department shall review the plan to determine whether it meets the control requirement in ss. NR 445.07(1)(c) or NR 445.11(1)(a)3 taking into consideration all of the following:
- a. Emission reduction objectives and targets and how they compare to the emission rates of comparable sources.
 - b. Provisions for research and development to reduce emissions.
 - c. Past efforts of the owner or operator to carry out environmental improvements.
- d. The adequacy of the procedures for ensuring that adjustments are made to the plan if progress is not being made toward the measurable emission reduction objectives and targets.
- (3) ENFORCEABLE LIMITATIONS. Any limitation elected under this section shall be placed in a permit or general or special order.
- (4) DETERMINATION OF HAZARDOUS AIR CONTAMINANT EMISSIONS AND CONCENTRATION. For the purpose of determining emissions and concentrations of hazardous air contaminants under this section:

- (a) The owner or operator of a source may rely on information on an approved material safety data sheet if the approved material safety data sheet lists a hazardous air contaminant listed in Tables A to C of s. NR 445.07 and for any hazardous air contaminant with a standard expressed as an ambient air concentration in Table A, B, or C constitutes 1% (10,000 parts per million) or more of the material or for any hazardous air contaminant with a standard expressed as a control requirements constitutes 0.1% (1,000 parts per million) or more of the material. If an approved material safety data sheet for a material is not classified as proprietary and does not list a hazardous air contaminant in Tables A to C at or above the amounts listed in this subdivision, that material will be presumed not to result in emissions of a hazardous air contaminant unless a hazardous air contaminant is formed in processing the material.
- (b) The owner or operator of a source may rely upon mass balance or other use, consumption and analytical methodologies for calculating potential or theoretical emissions. However, the department may require that a stack test be conducted to affirm the accuracy of emission estimations.
- (c) The owner or operator of a source is not required to consider emissions resulting directly from naturally occurring constituents in windblown soil.
- (d) The owner or operator of a source may rely on information generated by either the united states environmental protection agency screening or refined dispersion model to demonstrate either of the following:
- 1. Concentrations of a hazardous air contaminant will not exceed the ambient standard in column (g) of Table A or B.
 - 2. The source meet the provisions of sub. (2)(a)1.

Note: Contact the Wisconsin Department of Natural Resources, Bureau of Air Management, 608-266-7718 for additional information regarding procedures and protocols associated with US EPA screening and air dispersion models.

- (5) COMPLIANCE SCHEDULES. (a) Sources subject to the emission standards in s. NR 445.07 and constructed or last modified on or after [effective date of rule] shall demonstrate compliance upon startup.
- (b) Sources constructed or last modified prior to [effective date of rule] with potential, non-exempt emissions of a hazardous air contaminant less than the applicable threshold in columns (c), (d), (e) or (f) Table A, B or C shall maintain records in accordance with s. NR 439.04(1) and (2) [no later than 36 months after effective date of rule].

- (c) Sources constructed or last modified prior to [effective date of rule] with potential, non-exempt emissions of a hazardous air contaminant greater than the applicable threshold in columns (c), (d), (e) or (f) of Table A, B or C or subject to s. NR 445.07(4) shall:
- 1. Submit information adequate to describe how applicable control requirements in ss. NR 445.07(1)(c), (2)(b), (3), (4) or NR 445.09(3)(b) will be met [no later than 18 months after the effective date of the rule] in accordance with procedure in sub. (1)(d).
- 2. Demonstrate compliance with applicable standard or control requirement [no later than 36 months after effective date of rule].
 - 3. Submit the required information and compliance demonstration in accordance with sub. (6).
- (6) COMPLIANCE CERTIFICATION PROCESS. The owner or operator of any source needing to demonstrate compliance in accordance with the schedule in sub. (5)(c) shall do all of the following.
- (a) For sources subject to sub. (5)(c)1., the information required shall be submitted on the application forms required for an operation permit, an amendment to an application, renewal of the operation permit, or for a significant revision under s. NR 407.13.
 - (b) For all other sources, all of the following information shall be submitted in a certification:
- 1. The hazardous air contaminants listed in Tables A, B or C of s. NR 445.07 the facility is capable of emitting above its applicable threshold value.
 - 2. The applicable emission standard for each hazardous air contaminant identified under subd. 1...
- 3. The method used for determining compliance under subs. (1) or (2) for each of the hazardous air contaminant's applicable standards.
- 4. A description of the records that will be kept on site to verify continuous compliance for each contaminant with its applicable standard.
- 5. A signed and dated statement by the responsible official stating that the information in the certification is accurate to the best of his or her knowledge and belief, and that all of the requirements of this chapter have been met.

Note: Application forms for par. (a) may be obtained from, and submitted to, the regional and area offices of the department or the Wisconsin Department of Natural Resources, Bureau of Air Management, PO Box 7921, Madison WI 53707-7921, Attention: Operation Permits.

The address to submit certifications under par. (b) is: Wisconsin Department of Natural Resources, Bureau of Air Management, PO Box 7921, Madison, WI 53707-7921, Attention: NR 445 Certification.

- (7) DEPARTMENT REVIEW. The department shall review information submitted to comply with sub. (5)(c)1. to determine whether to approve, conditionally approve or disapprove the source's method to meet applicable control requirements.
- (8) COMPLIANCE EXTENSIONS. (a) The department may, at the request of the owner or operator of a source, grant an extension of any compliance deadline in par. (b)(2), sub. (5)(c)1. or 2. or s. NR 445.09(3), (4)(a) or (c)1. for a period not to exceed 6 months.
- (b) Notwithstanding the compliance deadline in sub. (5)(c)2. or s. NR 445.09(3), a source needing department approval under sub. (7) shall achieve final compliance with control requirements by the later of:
 - 1. [insert 36 months after the effective date of the rule].
 - 2. Eighteen months after the department's approval of a source's under sub.(7).
- (d) The owner or operator of a source which has achieved compliance with this chapter by installing emission control equipment may not be required to install additional control equipment to achieve compliance with this chapter for a period of 10 years after the installation of the control equipment or the useful life of the control equipment as determined by the department, whichever is less. For the purposes of this paragraph, increasing stack height, other dilution measures, or material reformulation may not be construed as installation of emission control equipment. Material reformulation which requires substantial capital expenditures for process equipment which was made with prior department approval and which results in a reduction of emissions of hazardous air contaminants which is sufficient to comply with the limitations of this chapter may be construed as installation of emission control equipment under this paragraph.

NR 445.09 Fuel, control and compliance requirements for compression ignition internal combustion engines combusting fuel oil. (1) APPLICABILITY. This section applies to any compression ignition internal combustion engine which is capable of combusting fuel oil, except as follows:

- (a) An engine with rated brake power less than 100 horsepower.
- (b) An engine used to provide an essential service.
- (c) An engine used to power an emergency electric generator exempt under s. NR 406.03(1)(w) or s. NR 407.03(1)(u).

- (2) FUEL REQUIREMENTS. Beginning [insert 6 months after the effective date of rule] the owner or operator of a compression ignition internal combustion engine shall only combust fuel oil designated for on-road use when firing the engine with fuel oil.
- (3) CONTROL REQUIREMENTS. (a) The owner or operator of a compression ignition internal combustion engine or engines which remain or will remain at a source for either 12 or more consecutive months, or for the full annual operating period at a seasonal source, and which combusts or will combust a total of 40,000 gallons or more of fuel oil, shall limit particulate emissions in accordance with one of the following:
- 1. For an engine installed at a source prior to [insert effective date of rule], install and operate a control device which is certified by either the California air resources board or the United States environmental protection agency to reduce particulate emissions to at least [emission rate] unless an alternative or equivalent control method is approved by the department.
- 2. For an engine installed or last modified on or after [insert effective date of rule], control particulate emissions to a level which is the best available control technology.
- 3. Where a compression ignition internal combustion engine capable of combusting fuel oil replaces an existing engine and performs the same or similar functions as the existing engine, the replacement will not be considered an interruption for purposes of determining under par. (a) how many months the existing engine remained, or will remain at the source or how many gallons of fuel oil the existing engine combusted or could combust in a 12 consecutive month period.
- (b) The owner or operator of a facility which conducts any testing involving the operation of an engine or engines subject to this section where the engine or engines combust 40,000 gallons or more of fuel oil in any 12 consecutive month period shall control particulate emissions from the facility from the engine or engines subject to this section to a level which is the best available control technology.
- (4) COMPLIANCE REQUIREMENTS. (a) The owner or operator of an engine subject to sub. (3)(a)1. shall certify compliance with this section no later than [insert date 36 months after the effective date of rule] by providing all of the following information:
 - 1. The rated horsepower of the engine.
 - 2. The manufacturer name of the control device.
 - 3. The product or model name of the control device.

- 4. The manufacturer's performance warranty for the control device [an emission rate of the controlled engine in grams per brake-horsepower hour].
 - 5. The test method used to by the manufacturer to determine the emission rate in subd. 3.
 - 6. The certifying agency for the control device.
 - 7. The date the control device was first put into operation.
- (b) The owner or operator of an engine subject to sub. (3)(a)2. or a facility constructed or last modified after [insert effective date of rule] subject to sub. (3)(b) shall submit information describing how best available control technology requirement will be met in a permit application in accordance with s. NR 406.03. Compliance with this section shall be demonstrated in accordance with the condition of the permit.
- (c) The owner or operator of a facility constructed or last modified on or before [insert effective date of rule] subject to sub. (3)(b) shall do both of the following:
 - 1. Meet the schedule in s. NR 445.08(5)(c)1. and 2.
- 2. Submit the information on the application forms required for an operation permit, an amendment to an application, renewal of the operation permit, or for a significant revision under s. NR 407.13.
- (d) Any submission made under this subsection shall be signed by a responsible official designated by the source for this purpose, with a dated statement that the information submitted is accurate to the best of his or her knowledge and belief and that all of the requirements of this section have been met.

Note: The address to submit information under par. (a) is: Wisconsin Department of Natural Resources, Bureau of Air Management, PO Box 7921, Madison, WI 53707, Attention: Compression Ignition Engine Certification

Application forms for par. (c) may be obtained from, and submitted to, the regional and area offices of the department or the Wisconsin Department of Natural Resources, Bureau of Air Management, PO Box 7921, Madison WI 53707-7921, Attention: Operation Permits.

Application forms for par. (b) may be obtained from, and submitted to: Wisconsin Department of Natural Resources, Bureau of Air Management, PO Box 7921, Madison, WI 53707, Attention: Construction Permit.

Drafters note: Section on incidental emitters has not been substantially modified from draft #4. The most notable change is the combining of the two pollutant tables. This section is expected to be modified once all of the comments have been received and considered.

NR 445.10 Compliance requirements for sources of incidental emissions. (1) The owner or operator-of a source described by a standard industrial classification code listed in Table "XX1" or which has actual annual

emissions of less than five tons of particulate matter and 3 tons volatile organic compounds shall determine if any of the following apply:

Table "XX1"

2-Digit SIC Code or Range	SIC Title
01-09	Agriculture, Forestry and Fishing
15	General Building Contractors
17	Special Trade Contractors
40-45, 47	Transportation
48	Communications
50-51	Wholesale Trade, except chemicals and allied products; petroleum and petroleum products
52-59	Retail Trade
60-69	Finance, Insurance and Real Estate
70-89	Services, except for Laundry, cleaning and garment services; Business Services, nec; Automotive Repair Shops; Miscellaneous Repair Shops; Research and Testing Services

- (a) One or more of the following processes is operated at the facility:
- 1. A compression ignition internal combustion engine or engines with rated brake power greater than 100 horsepower used as a power source.
 - 2. Any expected source of dioxins & PCBs.
 - 3. Solid, hazardous or medical waste incineration.
 - 4. Sludge incineration.
 - 5. Chrome electroplating.
 - 6. Ethylene oxide sterilizers.
 - 7. Printing operations using more than 'x' gallons of ink/month.
 - 8. Coating operations using more than 'x' gallons/month.
- (b) One or more of the following chemicals in Table "XX2" is included on a material safety data sheet for a raw material currently used at the facility.

Table "XX2"

Chemical Name	CAS No.	Chemical Name	CAS No.
Acetaldehyde	75-07-0	Hydrogen peroxide	7722-84-1
Acrolein	107-02-8	Hydrogen sulfide	7783-06-4
Acrylamide	79-06-1	Indium	7440-74-6
Acrylic acid	79-10-7	Iodine	7553-56-2

Acrylonitrile	107-13-1	Isophorone diisocyanate	4098-71-9
Ammonia	7664-41-7	Lead (all forms)	7439-92-1
Arsenic	7440-38-2	Maleic anhydride	108-31-6
Arsine	7784-42-1	Manganese compounds	7439-96-5
BCME (Bis chloromethyl ether)	542-88-1	Mercury	7439-97-6
Benzene	71-43-2	Methyl hydrazine	60-34-4
Benzo(a)pyrene	50-32-8	Methyl isocyanate	624-84-9
Beryllium	7440-41-7	Methyl isocyanate	624-83-9
Bromine	7726-95-6	Methylene bisphenyl diisocyanate	101-68-8
Bromine pentafluoride	7789-30-2	Nickel and compounds	7440-02-0
Butadiene, 1,3-	106-99-0	Octachloronaphthalene	2234-13-1
Cadmium	7440-43-9	Oxalic acid	144-62-7
Carbon Tetrachloride	56-23-5	Pentachloronaphthalene	1321-64-8
Chlorine	7782-50-5	Pentachlorophenol	87-86-5
Chlorine dioxide	10049-04-4	Phenylenediamine (mixtures and isomers)	106-50-3
Chlorine trifluoride	7790-91-2	Phosphine	7803-51-2
Chloroform	67-66-3	Phosphoric acid	7664-38-2
Chloromethyl methyl ether (CMME)	107-30-2	Phosphorus (yellow)	7723-14-0
Cobalt, metal dust	7440-48-4	Phosphorus pentachoride	10026-13-8
Diborane	19287-45-7	Platinum, soluble salts	7440-06-4
Dichloromethane (methylene chloride)	74-09-2	Propylene dichloride (1,2-dichloropropane)	78-87-5
Dichloropropene, 1,3-	542-75-6	Rhodium, soluble salts	7440-16-6
Diglycidyl ether	2238-07-5	Selenium compounds	7782-49-2
Ethylene dibromide	106-93-4	Sulfuric acid	7664-93-9
Ethylene dichloride	107-06-2	Tellurium and compounds	13494-80-9
Ethylene oxide	75-21-8	Tetrachloroethylene (Perchloroethylene)	127-18-4
Fluorine	7782-41-4	Thallium (soluble compounds)	7440-28-0
Formaldehyde	50-00-0	Tin, organic compounds	7440-31-5
Hexachlorobenzene	118-74-1	Toluene 2,4- & 2,6 diisocyanate mixtures	584-84-9
Hexamethylene diisocyanate, 1,6- (HDI)	822-06-0	Trichloroethylene (Trichloroethene)	79-01-6
Hydrazine	302-01-2	Trimellitic anhydride	552-30-7
Hydrochloric acid (hydrogen chloride)	7647-01-0	Triorthocresyl phosphate	78-30-8
Hydrogen bromide	10035-10-6	Tungsten, Soluble compounds	7440-33-7
Hydrogen cyanide	74-90-8	Vinyl chloride	75-01-4
Hydrogen fluoride	7664-39-3	Xylene-a,a'-diamine, m-	1477-55-0

(2) Owners or operators of facilities_meeting the criteria of par. (1)(a) shall meet the applicable requirements in s. NR 445.07 for hazardous air contaminants listed in Table A of that section as identified as being emitted from the process by the department.

Note: The department will publically make available a list of the hazardous air contaminants they have determined to be potentially emitted from the processes listed in par. (1)(a).

(3) Owners or operators of facilities_meeting either of the criteria in pars. (1)(b) or (c) shall meet the applicable requirements in s. NR 445.07 for the chemical listed in Table A of that section.

- (4) Owners or operators subject to subs. (2) or (3):
- (a) May use any applicable compliance demonstration allowed under s. NR 445.08(1) or(2)(a).
- (b) Shall meet the applicable compliance schedule under s. NR 445.08(5).

NR 445.11 Variance. (1) The owner or operator of a source may apply for and the department may grant a variance from s. NR 445.07(1)(a) for a contaminant having an ambient air standard based on an annual averaging time, or the LAER control requirements in s. NR 445.07(1)(c), (2)(b), (3) or (4) if the applicant demonstrates to the satisfaction of the department that applicable provisions under par. (a) or (b) are met. The department shall publish a notice of, and hold a public hearing on, any preliminary determination to approve a variance request under this section. The department shall grant or deny a variance request within 90 business days after the close of the public comment period on the request. The department shall review any variance granted under this section on a 5 year basis. Following its review and after notice and an opportunity for a public hearing and public comment, the department may modify, extend or rescind the variance.

- (a) An applicant for a variance from the LAER control requirements in s. NR 445.07(1)(c), (2)(b), (3) or (4) shall demonstrate all of the following to the satisfaction of the department:
- 1. Compliance with the LAER control requirements of s. NR 445.07(1)(c), (2)(b), (3) or (4) would be economically infeasible.
- 2. Residual emissions of the hazardous air contaminant in question would not cause significant harm to the environment or public health.
 - 3. The source's emissions would be controlled to a level which is the best available control technology.
- (b) An applicant for a variance from the emission limitation of s. NR 445.07(1)(a) for a contaminant having an ambient air standard based on an annual averaging time shall demonstrate all of the following to the satisfaction of the department:
- 1. All direct or portable sources owned or operated in the state by the owner or operator of the air contaminant source for which a variance is requested are in, or are on a schedule for, compliance with all other applicable requirements of chs. NR 400 to 499.
- 2. The emission limitation from which variance is sought is technologically or economically infeasible to meet due to conditions or special circumstances at the source, including adverse environmental or energy impacts.

- 3. Residual emissions of the hazardous air contaminant in question under the emission limitations proposed for inclusion in the variance would not cause significant harm to public health.
- 4. Good faith efforts have been made to comply with s. NR 445.07(1)(a) and all reasonably available alternative operating procedures and interim control measures to minimize emissions of the hazardous air contaminant will be utilized during the duration of the variance.
- (2) The department shall consult with the department of health and family services to determine that residual emissions would not cause significant harm under par. (1)(a)2. and (b)3. prior to establishing an emission limitation in a permit or order under this section.
- (3) Application for a variance under this section shall be submitted on the application forms required for a construction permit, an operation permit, an amendment to an application, renewal of the operation permit, or for a significant revision under s. NR 407.13.

NR 445.13 Hazardous air contaminant studies. (1) The Department may conduct studies of individual substances or categories or sources of substances if it determines that unique complexities may warrant alternative approaches to those listed in this chapter, or if the department otherwise needs additional information to determine whether to list the contaminant in Table A, B, or C in s. NR 445.07.

Note: Unique complexities may be the result of the nature of the emissions, the sources of emissions, the management of emissions or other factors. The studies will not include a re-evaluation of the classification of the substance as reported by the American Conference of Government Industrial Hygienists, the United States Environmental Protection Agency, the International Agency for Research on Cancer, or the National Toxicology Program.

(2) The department staff shall, in consultation with affected industry, public health officials and other interested parties, undertake two separate studies of the emissions of amorphous and crystalline silica and wood dust. The studies shall evaluate the sources and amounts of emissions and alternative strategies for minimizing public health risks. The department staff shall report progress on the studies to the natural resources board by [24 months after effective date of the rule].

SECTION NR 447.02 intro is amended to read:

NR 447.02 Definitions. The definitions contained in chs. NR 400 and 445 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

SECTION___ NR 447.02(4) is created to read:

NR 447.02(4) "Asbestos" means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthophyllite and actinolite-tremolite.

SECTION NR 448.02 intro is amended to read:

NR 448.02 Definitions. The definitions contained in chs. NR 400 and 445 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

SECTION____ NR 448.02(1) is renumbered NR 448.02(1m)

SECTION____ NR 448.02(1) is created to read:

"Beryllium" means the element beryllium. Where weights or concentrations are specified, such weights or concentrations apply to beryllium only, excluding the weight or concentration of any other elements.

PERCHLOROETHYLENE RELATED:

Drafters Note: Underline and strike through are from existing rule language

Note this change may be required if NR 423.04(3) is deleted or modified

SECTION____ NR 468.20(1)(b) is amended to read:

NR 468.20(1)(b) Each dry cleaning system that commences construction or reconstruction on or after December 9, 1991, shall be in compliance with the provisions of this section beginning on July 1, 1995 or immediately upon startup, whichever is later, except for dry cleaning systems constructed or reconstructed before September 22, 1993, which shall comply with sub. (3)(b) beginning on September 23, 1996, and shall comply with other provisions of this section by July 1, 1995.

Note: Dry cleaning systems installed before the date the federal rule became effective, September 22, 1993, are required under s. NR 423.04(3) to use a carbon adsorption system or equivalent.

CHANGES TO INCORPORATION BY REFERENCE LANGUAGE IF NECESSARY

Drafters Note: General amendment for NR 484 shown below.

SECTION___ Table 2 of NR 484.04 and Table 6B of NR 484.11 are amended to read:

Table 2 (23) NR 445.02(9m)

Table 6B (b) NR 445.06(4)

Document Number ISBN: 2000 Threshold Limit Values for Chemical 445.07(1)(b)

Substances and Physical Agents and Biological 445.07(5)(d)2.

Exposure Indices

The emission rates in columns (c)-(f) in Tables A-C should not be used if the source of the emission has a horizontal or obstructed discharge, or if terrain elevations that are more than 25% of the discharge height exist within 1000 feet of the stack.

Table A Emission Thresholds, Standards and Control Requirements for All Sources

	Chemical	Thresholds	(per averaging tin	ne expressed as lbs on points ¹	Ambient Air Standard	Averaging	Control	
Hazardous Air Contaminant	Abstract System #	<25 feet	25 to <40	40 to <75	≥75 feet	(per averaging time expressed as micrograms / cubic meter)	Time for Standard and Threshold	Requirement
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Acctaldabada	75-07-0	3.36	10.7	20.6	55.3	4,504	1-hour	
Acetaldehyde	73-07-0	808	3,318	7,900	27,845		Annual	BACT
Arsenic and inorganic compounds, as As	7440-38-2	0.413	1.698	4.04	14.25		Annual	LAER

Table B Emission Thresholds, Standards and Control Requirements for Manufacturers and Treatment and Disposal of Pesticides, Rodenticides, Insecticides. Herbicides or Fungicides

	Chemical	Thresholds	(per averaging tir	Ambient Air Standard	Averaging Time for	Control		
Hazardous Air Contaminant	Abstract System #	<25 feet	25 to <40	40 to <75	>75 feet	(per averaging time expressed as micrograms / cubic meter)		Requirement
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Aldin	309-00-2	0.0134	0.0522	0.105	0.405	6	24 hour	
1,3-Dichloropropene	542-75-6	0.244 444 3,554	0.947 1,825 14,600	1.91 4,345 34,762	7.361 15,315 122,517	109	24 hour Annual Annual	BACT

¹ For purposes of calculating emissions for comparison with the threshold values in columns (c), (d), (e) or (f) in the tables a source would:

¹⁾ combine emissions for each contaminant for all stacks in each of the 4 stack categories,

²⁾ compare each group of emissions against the respective threshold found in columns (c), (d), (e) or (f) in the table

³⁾ if any group exceeds it's respective threshold in column (c), (d), (e) or (f), consider all emissions from the source in determining compliance with the applicable standard or control requirement.

Table C Emission Thresholds and Control Requirements for Manufacturers, and Treatment and Disposal of Pharmaceuticals

Hazardous Air Contaminant	Chemical Abstract System #	Thresholds (per averaging time expressed as lbs/hr or lbs/yr) for emission points9 <25 feet 25 to <40 40 to <75 >75 feet				Ambient Air Standard (per averaging time expressed as micrograms / cubic meter)	Averaging Time for Standard and Threshold	Control Requirement
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Adriamycin	23214-92-8	2.43	10	23.8	83.9		Annual	BACT
Azathioprine	446-86-6	3.484	14.31	34.1	120.1		Annual	LAER